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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 10/715,689  
Filing Date: November 18, 2003  
Appellant(s): KRYWANCZYK ET AL.

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John S. Sensny  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed 10/10/2006 appealing from the Office action mailed March 08, 2006.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

The appellant's statement of the status of amendments after final rejection contained in the brief is incorrect.

No amendment after final has been filed, as per E-Dan and PALM records as of March 11. 2008.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is substantially correct. The changes are as follows:

Please see section 9 - grounds of rejection below.

## (7) Claims Appendix

A substantially correct copy of appealed claims 1-9,11,12,14,16-19 and 30-33 and 35 appears on pages 13 to 17 ( i.e marked 1-4) of the Appendix to the appellant's brief.

The minor errors are as follows:

No amendment after final under 35 U.S.C. 116 has been filed, as per E-Dan and PALM records as of March 11. 2008, to correct an informality in Claim 34 as alleged in Applicants' brief ( Section IV - Statement of Amendment Status) .

## **(8) Evidence Relied Upon**

WO 92/156651 Moon 9-1992

## **(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

## **Claim Rejections - 35 USC Section 102**

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action.

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-9, 11-12, 14, 16-19 and 30-35 are rejected under 35 U.S.C. 102(b) as being anticipated Moon et al. (WO 92/156651, herein after Moon).

With respect to claims 1 and 11 Moon describes a UV energy curable tape comprising:

a support layer, ( Moon page 5 line 30-page 6 line 2) an adhesive material positioned on said support layer. ( Moon page 5 lines 30 -page 6 line 2) and having /including a UV energy curable oligomer, (Moon Example 1 ) a UV energy initiator, ( Moon page 6 lines 19-28) and a material which starts to emit optical light when said tape is substantially fully cured ( Moon page 7 lines 18 to 21, e.g. UV dyes, pigments similar to UV dyes mentioned in Applicants' specification pages 9 line 17 to page 10 line 18).

It is noted that" and "becomes substantially fully cured" starts to emit light "is a hybrid product by process and particular use / functional recitation limitation for which no patentable weight can be given unless recited in proper format.

It is also noted that Applicants' have admitted ( remarks section of instant amendment i.e. faxed on 12114/2005) "Applicants' are claiming a tape that functions in a specified manner "it is noted that current case law requires the functional recitation, "becomes substantially fully cured" has not been given weight because it is narrative in form. In order to be given patentable weight, a functional recitation must be expressed as a" means" for performing the specified function, as set forth in 35 USC Section 112, 6<sup>th</sup> paragraph, and must be supported by recitation in the claim of sufficient structure to warrant the presence of functional language. In re Fuller 1929, C.D. 172, 388 O. G.

279. See also the prohibition against using apparatus and method use in a single claim IPXL holdings LLC v Amazon.com Inc. 77 USPQ 2d 1140.

With respect to claims 2 and 12, Moon describes the UV energy curable tape of claim 1, wherein said adhesive material comprises an acrylate oligomer. ( Moon page 5 lines 8-14).

With respect to claim 3 Moon describes The UV energy curable tape of claim 1, wherein said UV energy curable oligomer comprises a material capable of reacting with radicals to form longer chain polymers. ( Moon page 6 line 28 cross linking- inherent property when molecules cross link they from longer chain polymers/coplymers).

With respect to claims 4 and 14, Moon describes The UV energy curable tape of claim 1 , wherein said UV energy initiator comprises photoinitiator. ( Moon page 6 line 19).

With respect to claim 5 Moon describes the UV energy curable tape of claim 4, wherein said photoinitiator includes diphenyl groups that create radicals when exposed to UV energy. ( Moon page 6 lines 19-25).

With respect to claims 6 and 16 Moon describes the UV energy curable tape of claim 1 , wherein said material which emits optical light comprises UV sensitive ink. ( Moon page 6 line 20-pigments).

With respect to claims 7 and 17 Moon describes the UV energy curable tape of claim 6, wherein said material which emits optical light comprises from about .001 weight percent to about 20 weight percent of said tape. ( Moon claim 6).

With respect to claim 8 and 18 Moon describes the UV energy curable tape of claim 1 , wherein said material which emits optical light comprises UV sensitive dye. ( Moon page 7 line 20-21).

With respect to claims 9 and 19 Moon describes the UV energy curable tape of claim wherein substantially fully cured comprises the absorption of about 5 milli joules/cmz to about 10 joules/cmz of UV energy into said tape. ( Moon page 4 line 10).

With respect to claims 30 and 31 wherein the light emitting material emits light of second type different from first type, as the tape is being cured and the type of light emitted by said light material changes from said second type to said first type when the type becomes substantially cured and wherein the light matches the amount of energy required to substantially fully cure the tape, thereby to facilitate completely removing the tape from given substrate. ( rejected for reasons stated under claims 11 26, 27 etc.).

With respect to claim 32, Moon describes a UV energy curable tape of Claim 1, wherein: the material which starts to emit optical light is a UV sensitive material, ( Moon examples, tables ) and the light emitting energy range of the light emitting material matches the amount of UV energy required to substantially fully cure the tape. ( Moon page 10 last line table I etc.).

With respect to claim 33 Moon describes the UV energy curable tape of Claim 1, wherein said material which emits optical light comprises about 0.001% by weight of the tape; ( Moon- see rejection of claim 7 above ,page 6 lines 25-27, photo initiator is 0.01part and additive therein is dye/pigment in lesser amounts) said material which emits optical light starts to emit optical light on the first type when said tape absorbs about 10 2 of UV energy. ( joules / cm Moon, see rejection of claims 9 and 19 above, page 4 line 10).

With respect to claim 34 Moon describes a UV energy curable tape comprising : a support layer ( Moon page 5 line 30-page 6 line 2) ; an adhesive material positioned on said support layer ( Moon page 5 lines 30 -page 6 line 2), and including a UV energy curable oligomer, a UV energy initiator (Moon Example 1 ), and given a material for emitting light ( Moon page 7 lines 18 to 21, e.g. UV dyes, pigments similar to UV dyes mentioned in Applicants' specification pages 9 line 17 to page 10 line 18). ; wherein a defined amount of UV energy is needed to substantially fully cure the tape; ( inherent property that a defined amount of UV energy is required to fully cure a particular tape) and said same defined amount of UV energy causes the given material to begin to emit light of a even type, whereby said given material provides substantially fully cured a visible indication that the tape is substantially fully cured. (Moon page 7 27 to page 8 lines 2, etc. functional recitation-see below )

The limitation "said same defined amount of UV energy causes the given material to begin to emit light of a even type, whereby said given material provides substantially fully cured a visible indication that the tape is substantially fully cured. "is

taken to be "is a product by process limitation for which no patentable weight can be given unless recited in proper format. See *In re Fessman*, 180 USPQ 324,326 ( CCPA 1974), *In re Marosi et al.* 218 USPQ289. 292 ( Fed. Cir. 1983) and *In re Thorpe*, 227 USPQ964 966 ( Fed. Cir. 1985) and MPEP 2113.

It is also noted that Applicants' have admitted ( remarks section of instant amendment i.e. faxed on 12/14/2005) "Applicants' are claiming a tape that functions in a specified manner" it is noted that current case law requires the functional recitation, "becomes substantially fully cured" has not been given weight because it is narrative in form. In order to be given patentable weight, a functional recitation must be expressed as a " means" for performing the specified function, as set forth in 35 USC Section 112, 6<sup>th</sup> paragraph, and must be supported by recitation in the claim of sufficient structure to warrant the presence of functional language. *In re Fuller* 1929, C.D. 172, 388 O. G. 279.

See also the prohibition against using apparatus and method use in a single claim *IPXL holdings LLC v Amazon.com Inc.* 77 USPQ 2d 1140.

With respect to claim 35 Moon describes a UV energy curable tape according to Claim 34, wherein: said given material is a UV sensitive ink and comprises about 0.001% by weight of the tape ( Moon- see rejection of claim 7 above ,page 6 lines 25-27, photo initiator is 0.01 part and additive therein is dye/pigment in lesser amounts); and said given material starts to emit light of the given type when the tape absorbs about 10 joules/cm raised to 2 of UV energy. ( Moon page 4 line 10).

The recitation "said given material starts to emit light of the given type when the tape absorbs about 10 joules/cm raised to 2 of UV energy' is taken to a product by process limitation and also a particular use as explained in detail above and incorporated here by reference for the sake of brevity and not given patentable weight.

( The following is provided for ready reference and set up the context of some Applicants' arguments and this answer ).

#### **(10) Response to Argument**

Applicant's arguments are :

(1) should the Examiner take into consideration the feature that the tape includes material which starts to emit light of a first type when the tape becomes substantially cured; and

(2) if so, does Moon disclose this feature (Office Action of March 8, 2006, page 3, lines 4-7).

(1) The issue weather the Examiner should NOT take into consideration the feature that the tape includes material which starts to emit light of a first type when the tape becomes substantially cured should not determine the outcome because even though the limitation was not considered, the Examiner provided evidence in applied prior art ( Moon) wherein this limitation is disclosed assuming Applicants' will recite the limitation in proper format.

The rejection and remarks above ( in relevant parts states) :

"a material which starts to emit optical light when said tape is substantially fully cured ( Moon page 7 lines 18 to 21, e.g. UV dyes, pigments similar to UV dyes mentioned in Applicants' specification pages 9 line 17 to page 10 line 18).

It is noted that" and "becomes substantially fully cured" starts to emit light "is a hybrid product by process and particular use / functional recitation limitation for which no patentable weight can be given unless recited in proper format.

It is also noted that Applicants' have admitted ( remarks section of instant amendment i.e. faxed on 12114/2005) "Applicants' are claiming a tape that functions in a specified manner "it is noted that current case law requires the functional recitation, "becomes substantially fully cured" has not been given weight because it is narrative in form. In order to be given patentable weight, a functional recitation must be expressed as a" means" for performing the specified function, as set forth in 35 USC Section 112, 6<sup>th</sup> paragraph, and must be supported by recitation in the claim of sufficient structure to warrant the presence of functional language. In re Fuller 1929, C.D. 172, 388 O. G. 279. See also the prohibition against using apparatus and method use in a single claim IPXL holdings LLC v Amazon.com Inc. 77 USPQ 2d 1140.

Applicants' last contention that Moon does tech/suggest providing light emitting material is not persuasive because Applicants' specification describes one of their embodiments as : "Another example of a material which emits optical light when the tape composition is substantially fully cured is a UV dye. Examples of a commercially available UV dyes that can be used in this invention are the MSA family of dyes,

available from H.W. Sands Corn. 1080 E. Indiantown Road. Suite. Jupiter. FL, 33477.

If UV sensitive ink or dye are used as the material for this invention, the light emitting energy range is designed to match-the amount of energy required to substantially fully cure the tape so it can- release from the substrate.

Therefore when the tape is substantially fully cured the UV sensitive ink or dye will emit light. In this invention the ink or dye will change color to indicate when the tape is substantially fully cured.

The light emission can be sensed optically or by a machine capable of sensing optical light changes. The composition can be defined as substantially fully cured when it has absorbed from about 5 milli joules/cms to about 10 joules/cms of UV energy into the tape. If too little energy is used the tape will not be cured. If too much energy is used the tape can breakdown due to excessive heat. When this occurs there will be residual adhesive left on the bumps after removal of the tape or the chips can crack during picking due to high tack levels. This will be manifest at chip inspection. The UV energy source used in this invention is preferably UV light supplied by a bulb as pad of a UV lamp." ( applicants' specification page 9 lines 17 to page 10 line 18).

Therefore Moon's description of UV dyes/pigments used for the same purpose under similar circumstances will produce a UV energy curable tape comprising a material that starts to emit light of a first type when the tape becomes substantially fully cured ( as what is true for applicants' that UV dyes/pigments are material that starts to emit light of a first type when the tape becomes substantially fully cured, is also true for

the applied Moon reference whose UV dyes/pigments are material that starts to emit light of a first type when the tape becomes substantially fully cured).

It is noted that the inherent property of the dye to emit light when fully cured ( by the use of same material for the same purpose ) is true for Moon as is true for Applicants.

Applicants' cannot contend that their specification is enabling for the same inherent property for the same compound while the same ( emit light when cured) is not inherent for Moon, Further proof that Moon measures the extent of polymerization is seen on page 7 lines 27 to page 8 line including the citation of Gladyshev article as an example of measuring the extent of polymerization.”

Therefore weather the Examiner should NOT take into consideration the feature that the tape includes material which starts to emit light of a first type when the tape becomes substantially cured should not determine the outcome because even though the limitation was not considered, the Examiner provided evidence in applied prior art ( Moon) wherein this limitation is disclosed assuming Applicants' will recite the limitation in proper format.

b) Applicants' contention in their brief

“With regard to the first of these issues, it is important to note that Appellants are not claiming a cured tape, but instead are claiming a curable tape. Moreover, Appellants are not claiming any process for forming a tape, curable or cured. Instead, Appellants are claiming a curable tape that is provided with a feature that functions in a specified

manner -material which starts to emit optical light of a first type - under specified conditions - when the tape becomes substantially cured. This claim limitation is no more of a product-by-process limitation than any other claim limitation that describes a specific feature that functions in a specified manner under specified conditions."

It is noted that for the requirement that" and "becomes substantially fully cured" starts to emit light "is a hybrid product by process and particular use / functional recitation limitation for which no patentable weight can be given unless recited in proper format because it is immaterial for the present purpose ( i.e. reciting all elements of the claim in proper format ) weather Appellants are not claiming any process for forming a tape, curable or cured. Instead, Appellants are claiming a curable tape that is provided with a feature that functions in a specified manner is irrelevant to the issue.

c) Applicants' argument functional limitations must be given patentable weight, should be denied under the doctrine setout by the CCPA and C.D. in the Swinehart and Fuller cases.

Appellants' in their brief admit that their limitations are "Appellants are claiming a curable tape that is provided with a feature that functions in a specified manner - material which starts to emit optical light of a first type - under specified conditions - when the tape becomes substantially cured This claim limitation is no more of a product-by-process limitation than any other claim limitation that describes a specific feature that functions in a specified manner under specified conditions."

Appellants also add that they respectfully disagree. 35 USC 112, 6<sup>th</sup> paragraph allows a claim element to be described as a means plus function, but does not require that a functional recitation be described in this way.

It is noted that as stated in the rejection , case law namely In re Swinehart states,

“ It is elementary that the mere recitation of a newly discovered function or property, inherently possessed by things in the prior art, does not cause a claim drawn to distinguish over prior art . . .” In re Swinehart 169 USPQ 226 ( CCPA 1971).

The above case law also seconds the earlier dcision in the C.D. In re Fuller, 1929 C.D. 172, 388 O.G. 279, wherein “ In response to Applicants’ arguments, the functional recitation that curable tape that is provided with a feature that functions in a specified manner -material which starts to emit optical light of a first type - under specified conditions - when the tape becomes substantially cured] has not been given patentable weight because it is narrative in form.

In order to be given patentable weight, a functional recitation must be expressed as a “ manes” for performing the specified function, as set forth in 35 USC Section 112 , 6 th paragraph, and must be supported by recitation in the claims of sufficient structure to warrant the presence of the functional language “ .

Applicants’ contention that 35 USC 112, 6<sup>th</sup> paragraph allows a claim element to be described as a means plus function, but does not require that a functional recitation be described in this way is not correct , as per current case law.

Applicants' contention they describe sufficient structure is also not correct. As stated by Appellants in their brief "Claim 1, which is directed to a UV energy curable tape, describes, among other features, a support layer, a UV energy curable oligomer, and a material that starts to emit optical light of a first type when the tape becomes substantially fully cured."

This recitation does not provide sufficient structure namely where should the UV curable oligomer or " a material " be placed or what structure in the oligomer or " a material or what material gives it the property to make the UV energy curable tape, ( applicant's description -describes, among other features, a support layer, a UV energy curable oligomer, and a material that starts to emit optical light of a first type when the tape becomes substantially fully cured,) other than to describe that any UV energy curable oligomer / material be placed some where on the tape and it will start to emit optical light of a first type when the tape becomes substantially fully cured,

Therefore for all these reasons Applicants' improper functional recitation (material which starts to emit optical light of a first type - under specified conditions - when the tape becomes substantially cured) in the claims need not be given patentable weight.

II. Appellants contention is that Moon simply does not teach the principle of providing the tape with any light emitting material designed to start emitting light when the tape becomes substantially fully cured, is incorrect.

Appellants state" On this issue, the Examiner cites Moon, page 7, lines 18-21, which disclose that the tape may be provided with several materials including a dye. The present invention is much more than simply providing the tape with, for example, a dye. Instead, what is important is that the light emitting material is designed so that it functions in a particular way under specific conditions - that is, the material starts to emit light of a first type when the tape becomes substantially cured. The use of any dye for this purpose under these conditions is not disclosed in or suggested by Moon" is not persuasive for several reasons.

Appellants' contention that their disclosure the tape may be provided with several materials including a dye. The present invention is much more than simply providing the tape with, for example, a dye. Instead, what is important is that the light emitting material is designed so that it functions in a particular way under specific conditions - that is, the material starts to emit light of a first type when the tape becomes substantially cured is completely at odds with thier admissions in their specification.

As stated in the rejection above

"Applicants' last contention that Moon does tech/suggest providing light emitting material is not persuasive because Applicants' specification describes one of their embodiments as : "Another example of a material which emits optical light when the tape composition is substantially fully cured is a UV dye. Examples of a commercially available UV dyes that can be used in this invention are the MSA family of dyes, available from H.W. Sands Corn. 1080 E. Indiantown Road. Suite. Jupiter. FL, 33477.

If UV sensitive ink or dye are used as the material for this invention, the light emitting energy range is designed to match-the amount of energy required to substantially fully cure the tape so it can- release from the substrate.

Therefore when the tape is substantially fully cured the UV sensitive ink or dye will emit light. In this invention the ink or dye will change color to indicate when the tape is substantially fully cured.

The light emission can be sensed optically or by a machine capable of sensing optical light changes. The composition can be defined as substantially fully cured when it has absorbed from about 5 milli joules/cms to about 10 joules/cms of UV energy into the tape. If too little energy is used the tape will not be cured. If too much energy is used the tape can breakdown due to excessive heat. When this occurs there will be residual adhesive left on the bumps after removal of the tape or the chips can crack during picking due to high tack levels. This will be manifest at chip inspection. The UV energy source used in this invention is preferably UV light supplied by a bulb as pad of a UV lamp." ( applicants' specification page 9 lines 17 to page 10 line 18).

Therefore Moon's description of UV dyes/pigments used for the same purpose under similar circumstances will produce a UV energy curable tape comprising a material that starts to emit light of a first type when the tape becomes substantially fully cured ( as what is true for applicants' that UV dyes/pigments are material that starts to emit light of a first type when the tape becomes substantially fully cured, is also true for the applied Moon reference whose UV dyes/pigments are material that starts to emit light of a first type when the tape becomes substantially fully cured).

It is noted that the inherent property of the dye to emit light when fully cured ( by the use of same material for the same purpose ) is true for Moon as is true for Applicants.

Applicants' cannot contend that their specification is enabling for the same inherent property for the same compound while the same ( emit light when cured) is not inherent for Moon, Further proof that Moon measures the extent of polymerization is seen on page 7 lines 27 to page 8 line including the citation of Gladyshev article as an example of measuring the extent of polymerization.”

Appellants' contention that , “Moon does not disclose the use of a dye for the same function for which they are used in the present invention - to provide a visual indication that the tape has become substantially fully cured” is not persuasive because functional limitations cannot be given patentable weight unless recited in proper format ( Applicants' were given at least two-three chances to recite these limitations in proper format) and the Moon reference describes the provision of a visual indication ( when light is emitted upon fully curing ) the emitted light itself is a visual indication that the tape has become fully cured.

Therefore the above rejection over Moon fully meets the strict test as at least set out by the Court of Appeals for the Federal Circuit emphasizes that a strict identity test must be met in order for a reference to anticipate a claim under 35 U.S.C. 102. see also Apple Computer, Inc. v. Articulate Systems, Inc., 57 USPQ21057, 1061 (Fed. Cir 2000), the Court explained that: "Anticipation under 35 U.S.C. 102 requires the disclosure in a

single piece of prior art of each and every limitation of a claimed invention and the present rejection does not raise the issue of "Substantial identity" or "equivalency" as set out in *RCA Corp. V. Applied Digital Data Sys., Inc.*, 221 USPQ 385 (Fed. Cir. 1984).

Therefore Moon fully anticipates Claim 1 under 35 U.S.C. 102. Claims 2-9 and 30-33 are dependent from Claim 1 and do not further distinguish therewith over Moon. Accordingly, the Board of Appeal is respectfully requested to uphold the rejection of Claims 1-9 and 30-33 under 35 U.S.C. 102.

B. Rejection of Claims 11, 12, 14 and 16-19 should be Upheld for reasons stated above and those added below.

Appellants repeat their arguments with respect to claim 11 that it is similar to claim 1. However for reasons set out above and incorporated here by reference those arguments are not persuasive and the rejection must be upheld.

Appellants' contend that Moon, though, does not disclose that any light emitting materials can be included as part of the support layer.

Claim 11 recites "A UV energy curable tape comprising:  
a support layer including a material which starts to emit optical light of a  
first type when said tape is becomes substantially fully cured; and an adhesive material  
positioned on said support layer and having a UV energy curable oligomer and a UV  
energy initiator as part thereof."

Therefore Applicants' claim 11 recites a UV curable tape including a support layer that starts to emit optical light of a first type when said tape is becomes substantially fully cured; and an adhesive material positioned on said support layer and having a UV energy curable oligomer and a UV energy initiator as part thereof.

As stated in the rejection above MOON describes an adhesive material positioned on said support layer. ( Moon page 5 lines 30 -page 6 line 2) and having /including a UV energy curable oligomer, (Moon Example 1 ) a UV energy initiator, ( Moon page 6 lines 19-28) and a material which starts to emit optical light when said tape is substantially fully cured ( Moon page 7 lines 18 to 21, e.g. UV dyes, pigments similar to UV dyes mentioned in Applicants' specification pages 9 line 17 to page 10 line 18).

Therefore Moon describes light emitting materials can be included as part of the support layer.

Accordingly, the Board of Appeal is respectfully requested to uphold the rejection of Claims 11,12 , 14 and 16-19 under 35 U.S.C. 102.

C. Rejection of Claims 34 and 35 should be Upheld for reasons stated above and those added below.

Appellants repeat their arguments with respect to claims 1 and 11 under claims 34 and 35 . However for reasons set out above and incorporated here by reference those arguments are not persuasive and the rejection must be upheld.

Additionally they state Moon does not disclose that a defined amount of UV energy - which is the same amount of UV energy needed to substantially fully cure the tape - also causes the light emitting material to begin to emit light of the given type.

The rejection "With respect to claim 34 Moon describes a UV energy curable tape comprising :

a support layer ( Moon page 5 line 30-page 6 line 2) ; an adhesive material positioned on said support layer ( Moon page 5 lines 30 -page 6 line 2), and including a UV energy curable oligomer, a UV energy initiator (Moon Example 1 ), and given a material for emitting light ( Moon page 7 lines 18 to 21, e.g. UV dyes, pigments similar to UV dyes mentioned in Applicants' specification pages 9 line 17 to page 10 line 18). ; wherein a defined amount of UV energy is needed to substantially fully cure the tape; ( inherent property that a defined amount of UV energy is required to fully cure a particular tape) and said same defined amount of UV energy causes the given material to begin to emit light of a even type, whereby said given material provides substantially fully cured a visible indication that the tape is substantially fully cured. (Moon page 7 27 to page 8 lines 2, etc. functional recitation-see below).

The limitation "said same defined amount of UV energy causes the given material to begin to emit light of a even type, whereby said given material provides substantially fully cured a visible indication that the tape is substantially fully cured. "is taken to be "is a product by process limitation for which no patentable weight can be given unless recited in proper format. See In re Fessman, 180 USPQ 324,326 ( CCPA

1974), In re Marosi et al. 218 USPQ289. 292 ( Fed. Cir. 1983) and In re Thorpe, 227 USPQ964 966 ( Fed. Cir. 1985) and MPEP 2113.

It is also noted that Applicants' have admitted ( remarks section of instant amendment i.e. faxed on 12/14/2005) "Applicants' are claiming a tape that functions in a specified manner" it is noted that current case law requires the functional recitation, "becomes substantially fully cured" has not been given weight because it is narrative in form. In order to be given patentable weight, a functional recitation must be expressed as a "means" for performing the specified function, as set forth in 35 USC Section 112, 6<sup>th</sup> paragraph, and must be supported by recitation in the claim of sufficient structure to warrant the presence of functional language. In re Fuller 1929, C.D. 172, 388 O. G. 279.

See also the prohibition against using apparatus and method use in a single claim IPXL holdings LLC v Amazon.com Inc. 77 USPQ 2d 1140.

With respect to claim 35 Moon describes a UV energy curable tape according to Claim 34, wherein: said given material is a UV sensitive ink and comprises about 0.001% by weight of the tape ( Moon- see rejection of claim 7 above ,page 6 lines 25-27, photo initiator is 0.01 part and additive therein is dye/pigment in lesser amounts); and said given material starts to emit light of the given type when the tape absorbs about 10 joules/cm raised to 2 of UV energy. ( Moon page 4 line 10).

The recitation "said given material starts to emit light of the given type when the tape absorbs about 10 joules/cm raised to 2 of UV energy' is taken to a product by

process limitation and also a particular use as explained in detail above and incorporated here by reference for the sake of brevity and not given patentable weight'

Further Applicants' inability to recite claims 34 and 35 in proper format despite being given three/ four chances leaves not choice but to require Applicants' to first recite claims in proper format and present the application in proper format.

However, even assuming Applicants' do so the applied prior discloses the limitations for reason set out above.

III. Were Applicants' duty under 37 CFR 1.156 fulfilled.

For the purposes of preserving a full record the board is requested to enquire whether Applicants' have fulfilled their duty under 37 CFR 1.156.

The facts on record as follows.

The Examiner in the Non- Final rejection of 9/14/ 2005 in response to Applicants' arguments filed earlier, stated :

Applicants' arguments on page 7 last full paragraph quoting Moon page 7 lines 18-21, is an incomplete restatement of what Moon actually states. Applicants' have conveniently left out dyes pigments,

For the sake of completeness and ready reference \_ Moon page 7 lines 18 -21 are reproduced below.

"Other materials which can be blended with the polymerizable monomer mixture include fillers, tackifiers, foaming agents, antioxidants, plasticizers, reinforcing agents, dyes, pigments, fibers, fire retardants, and viscosity adjusting agents." (emphasis supplied).

The same dyes/pigments are also mentioned as "Another example of a material which emits optical light when the tape composition is substantially fully cured is a UV dye." in Applicants' specification.

The dyes/pigments left out from Applicants' last paragraph on page 7 is similar if not identical to those UV dyes stated in Application specification pages 9-10 and what is true for Applicants' (Another example of a material which emits optical light when the tape composition is substantially fully cured is a UV dye.

Examples of a commercially available UV dyes that can be used in this invention are the MSA family of dyes, available from H.W. Sands Corp. 1080 E. Indiantown Road, Suite, Jupiter, FL, 33477.

If UV sensitive ink or dye are used as the material for this invention, the light emitting energy range is designed to match the amount of energy required to substantially fully cure the tape so it can release from the substrate. Therefore when the tape is substantially fully cured the UV sensitive ink or dye will emit light. In this invention the ink or dye will change color to indicate when the tape is substantially fully cured.) is also true for the applied Moon reference.

Therefore even assuming arguendo that Applicants' argument that the product by process limitation that "the material starts to emit light when the tape becomes substantially fully cured," should be taken into account when determining the patentability of the claims is correct the Applied prior art of record (Moon) anticipates the limitation.

It is not understood how Applicants' attorneys can emphatically state "Applicants' attorneys have carefully reviewed the Office Action and Moon, and it is respectfully submitted that, in applying Moon. as the Examiner has done, the Examiner is considering photo initiators as light emitting materials. There is no disclosure in Moon, however, that the photoinitiators described therein are light emitting. The photo initiators disclosed in Moon react to light to irradiate the photo polymerization process. There is no disclosure in Moon that the photo initiators emit light. In contrast the materials used in the present invention not only emit light, but also do so in a specific manner - they start to emit light when the tape becomes substantially cured. (emphasis supplied).

It is noted for the record that the applied Moon reference ( at least on page 7 describes several additives to the polymerizable monomer including dyes/pigments , which are similar materials if not identical to the UV dyes described in Applications specification page 7 that is supposed to emit light to indicate when the tape is substantially fully cured.

Therefore, it is respectfully requested that the board uphold the rejection and grant any other relief deemed proper.

The examiner requests the opportunity to present arguments at the oral hearing.

/Steven H Rao/

Examiner, Art Unit 2814

Conferees:

Wael Fahmy/W. M. F./

Supervisory Patent Examiner, Art Unit 2814

Ricky Mack//R. L. M./

Supervisory Patent Examiner, Art Unit 2873